DOCUMENT RESU[illegible]

ED 157 344 EC 111 848

AUTHOR Hayden, Alice H.; Haring, Norris G.
TITLE Increasing Service Delivery to Handicapped Children by Replicating a Basic Model: "Transporting" the University of Washington's Down's Syndrome Program.
PUB DATE Jun 78
NOTE 14p.; Paper presented at the World Congress on Future Special Education (First, Stirling, Scotland, June 25 - July 1, 1978)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS Conceptual Schemes; *Demonstration Projects; *Downs Syndrome; Elementary Education; Mentally Handicapped; *Models; Preschool Education; *Program Descriptions

ABSTRACT

The paper discusses tested and approved basic models and their replication, with special emphasis on replications of an educational program for Down's syndrome children (preschool to elementary age). Essential components of the program are noted to include individualized programs, instruction based on the normal sequences of development, short- and long-term goals for each child, both group and one-to-one activities, and parent involvement. Replication of the Down's program is described. (SBH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

243 #9

SEP 7 1978

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED157344

INCREASING SERVICE DELIVERY TO HANDICAPPED CHILDREN BY REPLICATING A BASIC MODEL:

"Transporting" the University of Washington's Down's Syndrome Program

Alice H. Hayden, Ph.D.

Professor of Education

and

Director, Model Preschool Center

for Handicapped Children

Experimental Education Unit

Child Development and Mental Retardation Center

University of Washington

and

Norris G. Haring, Ed.D.

Professor of Education,

University of Washington,

and

Principal Investigator, Western States

Technical Assistance Resource (WESTAR)

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

C.E.C.

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

EC 111 945

©

At this conference, while we are engaged in discussions about international perspectives in special education, it seems altogether appropriate to describe an international collaborative effort that has broadened perspectives and opportunities for special children, their families, and the people who serve them. The topic is also appropriate in that it addresses another contemporary concern: making the best use of available (but dwindling) resources in order to extend services to wider circles of children who need them. The number of children may in fact be increasing owing to better identification and diagnostic procedures, more inclusive educational opportunities, and increased community and political pressure to serve young handicapped children.

Our focus in this paper is to discuss tested and approved basic models and their replication, with special emphasis on replications of an educational program for Down's syndrome children developed at the University of Washington. We are particularly interested in describing a replication/adaptation undertaken by faculty and staff at Macquarie University in Australia.

Models

Model building is very much in vogue in many fields. The word "model" in fact is used with different connotations and in diverse contexts; the models themselves are often quite elaborate. Yet the reasons for their existence are often obscured. Our view is that models serve a most practical, down-to-earth function: they encourage <u>efficient</u> management of service delivery. In the context of educational program planning, it stands to reason that not having to reinvent the wheel each time a program is started can save time, energy, and resources. But there is more to this than merely avoiding or lessening the inevitable

trial and error: there is also the benefit of avoiding poor or counter-productive educational practices that not only do not help children who are supposed to be served but may also bring harm to them. No doubt the promise of such programmatic and practical efficiency led the U.S. Office of Education to use the system of models as a means of increasing service delivery to young handicapped children. Through its Joint Dissemination and Review Panel, the Office of Education approves for replication select programs that have demonstrated effectiveness.

The two critical questions that must be addressed in any evaluation of models are these: Does the model work? And, if it works in the setting in which it was developed, will it "travel"? We are all familiar with plans that look good on paper but go awry in delivery. It is the implementation in the field that often tests in unexpected ways the model's concepts and its builders.

As the co-directors of a program that has had responsibility for developing basic models in several different areas--models for Head Start staffs to use in integrating handicapped children into their programs; demonstration service and training programs to be used with a wide variety of handicapped children in many different environments--we would like to comment on what we have learned about transporting ideas and programs to others outside of the demonstration setting.

Extending Basic Models

In any service delivery, one assumes that the service offered is good--that it will meet identified needs; and that the service is wanted. Beyond that, there is room for enormous variety of delivery styles--yet the success of the transfer will depend on far more than style. The

critical task in replication is to distinguish between wholesale adoption of a model and adaptation that takes full account of the needs, constraints, resources, and competencies in the specific field setting. Imposing a "package" of predigested ideas, materials, procedures, and approaches almost invites failure, even though one knows that the model has been tested and works. The problem is that such an approach fails to give the field people any sense of "ownership"--of responsibility for developing strategies or opportunities to test out the ideas in their own milieu. What happens after the model builders leave, then, is often a lack of follow-up, and, inevitably, a failure to provide the needed services that the model was intended to deliver.

We have found that an essential first procedure in model replication is to ask the field staff to articulate their needs as <u>they</u> perceive them and to state what they hope to accomplish or what outcome they wish to achieve as a result of our work. This exercise leads to <u>their</u> defining the assistance that we can give, and it provides a context in which service can be delivered. We and they mutually identify the essential components of our model that can be applied in the field setting, and that context permits considerable variation in local adaptation. Such a procedure also structures the technical assistance that will be offered: if a staff can isolate specific training or service needs, these can be built on existing capabilities. In identifying the essential components, there are a number of specific questions that must be addressed--many of which have already been answered by the replicating staff in their initial needs assessment. For instance, we need to know how many children are involved in the program, and their ages and handicapping conditions; the nature of the setting (field-based, home-based, etc.); the kinds of resources and support that are available

in the community; the extent of the training the staff have had; the screening and diagnostic procedures used, to name just a few.

The ongoing relationship between our staff and the field staff involves what can only be called a spirit of inquiry: a continuous review of procedures to find out if and how well they are working, an objective analysis of ongoing needs for training or materials, and a review of our own progress in providing useful assistance. This also involves exchange of data between the model and replicating programs; it is impossible to evaluate the effectiveness and efficiency of a program without extensive data collection. The end result of this kind of examination is a systematic, objective, and goal-directed approach to a program: observation of children, measurement of pupil progress, and striving to make more efficient use of staff time. Needless to say, this approach has also meant continuous review and modification of the basic model; what we learn from field programs often matches what we have been able to offer to them.

In many respects, the process just described--identifying and responding to articulated needs, constantly reviewing and revising programs, and evaluating procedures--has characterized the evolution of the Down's Syndrome Program at the University of Washington, both as a basic model and as a much replicated program.

The Down's Syndrome Program Model

Background. In 1971, staff at the Model Preschool Center for Handicapped Children (University of Washington, Seattle) began an interdisciplinary, data-based program of systematic intervention with a small group of preschool age, home-reared Down's syndrome children from the

Seattle area. Since that time, the program has been extended, in response to identified needs, to serve younger and older children. In 1974, with research funding from the Bureau of Education for the Handicapped, the staff began what might be called a second-generation program: a replication and extension of the basic preschool program in public school elementary classes, with the purpose of testing the model's effectiveness in enabling older Down's children (including graduates of our program) to accelerate and maintain their developmental progress. One of the research questions addressed is whether it would be possible, through such systematic, aggressive programming, to alter the usual prognosis for Down's children's development of intellectual decline with advancing age. At the same time that this replication was evolving, the basic preschool model was replicated in approximately 30 centers throughout the United States and abroad. Thus, what began as a small program serving a few local children has become a major longitudinal study of home-reared Down's syndrome children from birth through elementary age with an extensive data base. The Down's Syndrome Program has been described in detail elsewhere (see Hayden and Dmitriev, 1975; Hayden and Haring, 1976 and 1977). Only a brief description of the program's rationale and major components will be presented here.

Down's syndrome occurs in approximately one in 650 live births. It is a chromosomal anomaly that causes a wide range of physical and behavioral problems, including mental retardation. It is the most prevalent identifiable form of mental retardation, and Down's syndrome persons have traditionally constituted the largest single group of residents in institutions. Because this syndrome is identifiable at or shortly after birth, it is possible to begin educational programs for Down's syndrome

children almost immediately. Yet educational programs are precisely what were lacking in the past for these children, who all too often were placed in institutions. Traditional views of their capabilities were very limited, and the institutionalization--as well as the behaviors it encouraged or failed to encourage--merely perpetuated those views. (See Rynders et al, 1978). In the last decade, however, parents and educators have begun to challenge the pessimism of the past, reasoning that programs showing success with other groups of handicapped children might also promote the development of Down's syndrome children. It was this view that led a small group of parents and educators to begin the Down's Syndrome Program.

The program's essential components. The Down's Syndrome Program is developmental, interdisciplinary, and data-based. Its critical elements, the components that are transported to replication sites, are these:

1. Each child receives an individualized program that is based on his own progress in all areas of skill development. The child's performance in all areas is initially assessed when he is referred to the program and is monitored continuously, through daily observation and periodic evaluation with standardized instruments.

2. All instructional programs are based on the normal sequences of development, and the instructional tasks that are used in order to promote that development are broken out into small, discrete, orderly steps. The child enters the sequence at the place where he is developmentally ready, and his skill development builds on the developmentally appropriate skills he has already acquired.

3. Short-term and long-term goals are identified for each child, the goals based on the normal developmental sequences. The child's progress

in acquiring and maintaining skills is reviewed in terms of these goals, and whenever that progress seems inappropriate, the staff review the child's program with a view to changing it as necessary in order to improve the progress. The point of view is always to find out what is wrong with the program, not what is wrong with the child.

4. The school day is divided into times when children learn in small groups, in one-to-one sessions with a teacher or teacher's assistant (for instance, during "concept time"), and in activities in which the whole class can participate together (such as music, outdoor play, and story time). Each kind of teaching serves a different purpose. As the children approach the time when they will "graduate" to a public school program, they spend more and more of their time in larger groups, to more nearly approximate the conditions they will experience in the public school.

5. Parents play an active role in this program, from the moment they bring their child to an initial intake appointment until the child moves to the public schools. Parents continue to be involved as the child progresses in the new setting. Any program that is concerned with continuity and maintenance of progress must account for the many more hours that the children are at home than at school. Accordingly, parents are given training that permits them to continue at home the instructional activities that are used at school. In addition, parents actively participate in the classroom: they work with teachers in weekly infant sessions or in programs for older children, learning the basic exercises that they will do at home and learning how to keep performance data that they will discuss with the teacher during the class session; as their children move into preschool and kindergarten classes, the parents work as instructional assistants with individual children or

small groups of children. This is a departure from the usual practice of having parents merely serve juice and clean up the classroom; its benefits are demonstrable.

To summarize, replicating sites are assisted in:

1. assessing each child initially (using the Down's Syndrome Performance Inventory developed by the model program's staff);
2. setting goals and objectives for each child;
3. planning and carrying out a program to meet these objectives in the classroom and in individualized instruction;
4. using ongoing assessment to determine the effectiveness of the program, and using the data as a guide, continuing or changing the program;
5. monitoring pupil acquisition and maintenance progress quarterly through data;
6. using the principles of behavior;
7. arranging for teachers to participate in training where needed in order to implement procedures; and
8. involving parents in the classroom and/or in carryover or supplementary programs at home.

Replication of the Down's Program at Macquarie University, Sydney, Australia

The Australian replication of our Down's Program is unusual because it is a cross-cultural effort, involves very long distance collaboration, and is one of the few replications that began in a university setting. Early in 1975, Dr. Bernie Thorley, Senior Lecturer in Special Education, Macquarie University, began discussions with us about the possibility of transporting our program to Australia, and since that time, there has been an exchange of staff between the two centers, training provided to the project staff in Sydney, use and revision of the materials developed in the Seattle program, and as complete a replication of the program as exists anywhere.

In mid-1975, Mrs. Moira Pieterse, Senior Tutor in Special Education at Macquarie, began a small pilot porgram with four children, with a view to determining the feasibility of replicating the Seattle program. Since then, the program has been extended to serve children from infancy through kindergarten, and now serves _____ children in _____ classes. In addition, in the earlier years of the program, a group of older Down's children who were institutionalized were served. Since 1975, the program has transferred to a public school setting; and some of the institutionalized children have made sufficient progress to permit their enrollment in public school.

Staff at Macquarie are collecting the same demographic and progress data on children as those collected in Seattle and elsewhere in the United States, thus extending the data base of this longitudinal study. Further, word of the program has attracted many visitors to the classes, and many parents of Down's children not enrolled have brought their

children in for assessments, including one child from as far away as Hong Kong. The experience of assessing these additional children has extended the data base even further, and has offered the staff increased opportunity to practice using the Down's Syndrome Performance Inventory, originally developed by the Seattle program's staff.

The structure of the program is similar to that of the model. Parents are involved integrally in the program, and receive intensive training in child management, data collection, and instructional procedures. Classes are organized like those in Seattle, with programs for infants, who come with their parent(s) to the center once a week, and for early and advanced preschool children, who are at school three times a week. The class day is divided into individual concept time and group activities designed to promote the children's development of gross and fine motor, cognitive, communication, social, and self-help skills. The curriculum consists of finely-sliced tasks based on the normal sequences of development. Classes are staffed by a head teacher, assistant teacher, a graduate student, and an aide, usually a parent. Assessment of child performance is continuous, an "essential characteristic of the Down's Program" (Pieterse, 1976).

Dr. Thorley has commented:

> "Handicapped children can learn complex and abstract tasks which were once thought to be well beyond them only if there is a high degree of structure in, and control over, the initial learning environment. ...Our prime target in broad terms is to develop a viable, economically feasible and optimally effective, model program that could be established wherever the need exists, and that will support parents in keeping their children's development as close to normal as possible; especially in the educationally significant areas. In order to achieve that it has been considered advisable to start as early as possible... In the short term the goal is to have these children functioning at normal levels in pre-academic, academic and social skills by the time they are 5 years of age, so that they can be given an opportunity to take their place beside their normally functioning peers in an educational setting. The question of the further support needed to maintain them in that environment is one that is also being closely examined."

At the Council for Exceptional Children World Congress, slides were shown by Valentine Dmitriev of the Model Preschool Center in Seattle and by Moira Pieterse from the Austailian replication site. First there were examples of activities and procedures shown from the Model Preschool followed immediately by similar examples from the replication site. This alternating procedure was designed to demonstrate the ease with which the program could be replicated and the similar results that could be obtained through carefully planning and implementing the replication.

References

Hayden, A. H., & Dmitriev, V. Early developmental and educational programs for the child with Down's syndrome. In B.Z. Friedlander, G. Kirk, and G. Sterritt (Eds.), The exceptional infant, Vol. III. New York: Brunner/Mazel, 1975.

Hayden, A. H., & Haring, N. G. The acceleration and maintenance of developmental gains in Down's syndrome school-aged children. In P. Mittler (Ed.), Research to practice in mental retardation. Vol. I: Care and intervention. Baltimore: University Park Press, 1977.

Hayden, A. H., & Haring, N. G. Programs for Down's syndrome children at the University of Washington. In T. Tjossem (Ed.), Intervention strategies with risk infants and young children. Baltimore: University Park Press, 1976.

Pieterse, M. Report on Down's Syndrome Program, Years 1975-76. Macquarie University, Sydney, Australia.

Rynders, J. E., Spiker, D., & Horrobin, J. M. Underestimating the educability of Down's syndrome children: Examination of methodological problems in recent literature. American Journal of Mental Deficiency, 1978, 82:5, 440-448.

Thorley, B. The need for early education of the intellectually handicapped. Proceedings of the Early Childhood Special Education Conference held July 17-18, 1976, at Macquarie University, Sydney, Australia, by the N.S.W. Council for the Mentally Handicapped and the Australian Group for the Scientific Study of Mental Deficiency.